

Mentoring
Investigative Minds



Annual Report: 2017 Year in Review



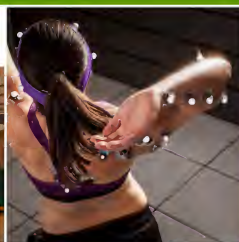
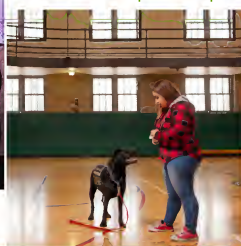
The margin of excellence. It's what makes a vision a reality, grows a strong program into a preeminent one and turns the most promising research ideas into the most effective new treatments. Philanthropy builds that margin, ensuring that the scientific advancement of medicine is limited only by the boundaries of what's achievable, not by the bottom line of what's affordable.

Across Rush in 2017, our donors, partners, alumni and friends brought us closer to a future marked by heightened access, quality, prevention and outcomes for our patients and the communities we serve. These are just a few of those stories.



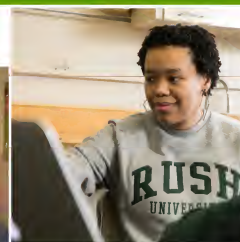
Personalizing
Cancer Care

Comforting Veterans With
Constant Companionship



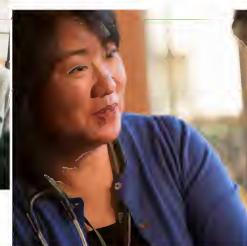
Understanding
Life-altering Injuries

Bridging the Gap
to Success



Leading the Future
of Health Care

Improving Quality
of Life



Leadership Message

Margin of Hope

No matter how great an idea might be, it can only fully come to life with the support of others who believe in it. Our annual report is proof of just this, showcasing how your support enables us to turn great ideas into reality.

From new treatments and therapies, to reducing inequities across the Chicago area and beyond, all of these accomplishments from the past year were made possible by the generosity of our donors, friends, faculty and staff, alumni and volunteers. This is undoubtedly the same generosity that builds the margin of hope at Rush for patients, families and communities, bridging the gap between great needs and even greater promise.

Thank you, donors and friends, for continuing to bring new ideas to life.



Larry Goodman, MD
Chief Executive Officer, Rush
President, Rush University



Michael Dandorff
President, Rush University Medical Center
and Rush System for Health



Personalizing Cancer Care

More than 1.6 million people were diagnosed with cancer in 2017, and each case is different. If we know which therapies have the best chance to succeed in fighting the disease, then every cancer patient can be treated based on the data in aggregate of all the cancer patients who came before them. Academic medical centers such as Rush have the talented and trained experts to translate genetic data into personalized treatments, but they need help storing and cataloging the vast array of cancer information.

To meet this need, entrepreneur Eric Lefkowsky created Tempus, a biotechnology company that collects, stores and analyzes massive amounts of genetic data, clinical information and tissue samples from top cancer programs across the country.

Thanks to a partnership with Tempus, Rush's cancer team and researchers will be able to make data-informed decisions in real time to better treat a wider range of challenging cancer cases. Additionally, Rush and Tempus are working together to develop 3-D models of individual tumors and cancerous tissue to test how patients could respond to future treatments. This combined effort will lead to better screenings and prevention strategies in addition to individualized treatment plans.

"Tempus can structure clinical data and combine it with molecular data on a scale that's hard to find. Together with Rush's novel cancer therapies and research, I believe we can improve patient outcomes in even the most dire of cases."

**– Eric Lefkowsky, co-founder
and CEO of Tempus, Inc.**



Comforting Veterans With Constant Companionship

A military veteran suffering from post-traumatic stress disorder, known as PTSD, could experience nightmares so powerful that they wake in the middle of the night. PTSD can also lead to isolation and withdrawal from the outside world, among other challenges. Traditional weekly therapy might not be intensive enough for the singular traumas of military service, but inpatient hospitalization might be too severe. Together, longtime Rush supporter Susan Regenstein and staff at Rush's Road Home Program created an unconventional initiative to help meet this specialized need.

Established with the generosity of The Regenstein Foundation, the Regenstein Service Dog Initiative has enabled Road Home to connect veterans with well-trained companions who will assist them at all hours of the day and night at no cost. Service dogs bring warmth and connection, as well as a sense of responsibility for the veterans. The dogs can sense when their veterans' anxiety is raised and comfort them, even if they are asleep. They encourage social interaction and support veterans in public settings that may be too overwhelming alone. Best of all, the dogs love their veterans unconditionally and without judgment.

Enabling Inventive Care for Veterans

The Regenstein Foundation donated \$1.5 million to the Road Home Program: The Center for Veterans and Their Families at Rush. The gift will cover costs for training and pairing of dogs with more than 90 veterans with diagnosed needs during the next three years, as well as ongoing costs for the dogs, including veterinary visits, food and continued training.

"The dogs are always with their veterans. They don't judge them. They don't care what happened yesterday. They just want everything to be good for their owner."

– Ryan Brown, outreach coordinator
at the Road Home Program: The Center
for Veterans and Their Families at Rush



Understanding Life-altering Injuries

Reaching for items high on a shelf. Perfecting your golf swing. Lifting a laughing child into the air. Simple, everyday actions like these could lead to shoulder injuries that drastically reduce quality of life or, even worse, the ability to earn a living. In 2015 more than 12 million Americans went to their doctors because of shoulder pain, and we don't yet know the signs that someone is at risk for shoulder injury ahead of time. But if we can better understand how the complex shoulder joint works, we can find methods to prevent life-altering injuries and conditions.

To start making that vision a reality, patients of Anthony Romeo, MD, a longtime innovator of shoulder repairs, treatments and replacements at Midwest Orthopaedics at Rush, were inspired by his efforts to recruit a scientist who could further advance this work. With philanthropic support, Antonia Zaferiou, PhD, joined Rush to study how people use their shoulders during daily life and sports activities to better inform and enhance Romeo's efforts to help his patients recover and return to an active lifestyle. Using wearable sensors and motion-capture technology, Zaferiou and her colleagues are gaining valuable new insight into how people change their movements when they are injured or when they try to avoid pain. And by detecting electrical signals traveling through muscles, she and her team can better understand how the brain is commanding the body to move.

"By understanding movement mechanics of healthy and unhealthy shoulders, we can better anticipate if people are at risk for injury. Thanks to the foresight of Anthony Romeo, MD, and his patients, we may find signs of shoulder problems before they become major difficulties."

— Antonia Zaferiou, PhD, co-director of the
Joan and Paul Rubschlager Motion Analysis
Laboratory and orthopedic department faculty



Bridging the Gap to Success

At Simpson Academy for Young Women, the only Chicago Public School that exclusively serves pregnant and parenting teens, Rush's school-based health center provides a safe space for young women like Nada McMullen to pursue higher education while receiving necessary health care services for herself and her 1-year-old son. Thanks to this unique integration of education and medical resources, Nada will thrive through the school's nearly 100 percent graduation rate and college acceptance rate — versus the average 69.4 percent graduation rate at Chicago Public Schools.

Donors such as the Polk Bros. Foundation, Allstate Insurance, Epic and The Woman's Board of Rush University Medical Center enable Simpson Academy, along with Rush's two other school-based health centers, to provide primary, preventive and mental health services where youth frequently struggle to access quality health care. With many of these students residing in neighborhoods of prevalent poverty and violence, the clinics equip them with the tools and skills needed to effectively cope with traumatic experiences and health conditions — ensuring they can stay healthy and on track academically to successfully transition into college and their careers.

"Through this integrated support system, I am reminded each day of why I want to be here, why I want to learn and how I am capable of pursuing great things in life."

— Nada McMullen,
18-year-old Simpson Academy student



Leading the Future of Health Care

Witnessing widespread racial and health disparities in her own neighborhood, Camille Johnson knew that a career in medicine meant she could be a leading voice for communities so desperately needing to be heard. When applying to medical schools, she sought out an institution that would amplify this voice. After learning of Rush's longtime health equity programs in Chicago's most underserved communities, Camille's choice was clear — although almost financially unattainable.

The Ariel Investments Endowed Scholarship for African-American Students, however, provided Camille the assistance she needed to attend Rush University. Designed to support the best and brightest medical students, the scholarship attracts and retains aspiring physicians at Rush who exhibit leadership and passion for health care. While underrepresented minorities still account for only 6 percent of U.S. physicians, this fund has helped pave the way for 14 African-American students to join the ranks of leading physicians, educators and administrators in greater numbers.

"I want to be not only a stable presence for my patients, but a face that younger people can see themselves in — someone who looks like them, in a career they never thought was possible for themselves."

— Camille Johnson,
Rush Medical College student



Mentoring Investigative Minds

New health care researchers face an unexpected challenge: Without proper funding, even the most revolutionary idea might not reach people in need. In the last five years, only 18 percent of National Institutes of Health, or NIH, grant applicants received funding. Gian Pal, MD, MS, encountered this daunting challenge while entering Rush's Cohn Fellowship Program, established with a generous gift from the Cohn family. His mentor Deborah A. Hall, MD, PhD, an accomplished Parkinson's disease and movement disorders researcher and clinician at Rush, guided Pal through the process of gathering initial data and making a compelling case for seed funding. As a result of Hall's guidance and Pal's resilient efforts, he has now received support from NIH in addition to private donations from individuals such as Christine and John Bakalar to take his Parkinson's disease research ideas even further.

Many Parkinson's patients, but not all, find relief from their symptoms through deep brain stimulation, or DBS — a surgical procedure in which a device is implanted into the brain to help control movements. Pal was awarded NIH funding in 2017 with the vision that genetic information could be used to identify patients who will fare best with DBS. This is among 46 different Parkinson's research studies happening now at Rush, and Pal has become an integral part of this internationally recognized program. Today Pal is a faculty member with an office right next to Hall's office at Rush, where they continue to collaborate for the benefit of current and future movement disorder patients.

Continuing Excellence in Solving Parkinson's Puzzles

One of the largest and oldest programs of its kind in the country, the Rush Parkinson's Disease and Movement Disorders Program is a longstanding Parkinson's Foundation Center of Excellence, based on decades of clinical and research excellence. Now Rush is recognized as a National Parkinson Foundation Center of Excellence as well.

"Thanks to guidance from Deborah Hall and the movement disorders faculty, I am pursuing multiple avenues of Parkinson's research that will lead to new and improved treatments with the ultimate goal of stopping this disease."

— Gian D. Pal, MD, MS, assistant professor in the Department of Neurological Sciences at Rush and former Cohn Research Fellow



Improving Quality of Life

Every day Masako Mayahara sees families in crisis as they care for terminally ill loved ones. As a palliative care nurse, though, she steps in to manage the patient's medical care and reduce any pain, allowing family members to become emotionally present in an often fragile moment. However, there are only 200 palliative medicine training fellowships in the U.S. each year. This has undoubtedly led to a shortage of care providers trained in palliative care — the front-line champions who must educate patients on their options when a life-threatening diagnosis is made.

Funding cancer care and supportive oncology for more than three decades, the Coleman Foundation set out to address the critical workforce shortage through The Coleman Palliative Medicine Training Program. With Rush as the administrative home for the grants awarded, nearly 25 local institutions participate in training palliative care physicians, nurses, social workers and chaplains to implement palliative care best practices at their sites, and improve access to services in Chicago and its surrounding areas. Since the program's inception, 52 fellows including physicians, nurses, social workers, chaplains and other clinicians have been trained using didactics, online learning and one-on-one mentoring by a palliative care expert. With the Coleman Foundation's continued support of palliative medicine training, more health care professionals are bringing vital support and improved quality of life to greater numbers of patients facing a life-limiting illness and their families.

Treating the Whole Person

The Coleman Foundation Comprehensive Cancer Clinics at Rush bring together multidisciplinary teams that design personalized cancer treatment plans to meet each patient's unique needs. With Rush's thriving clinical research program, doubling in enrollment in the past year, the clinics offer the latest diagnostic capabilities and leading-edge treatment options. These successes, among others, have ultimately led to Rush's cancer program being named one of the best in the country by *U.S. News & World Report*.

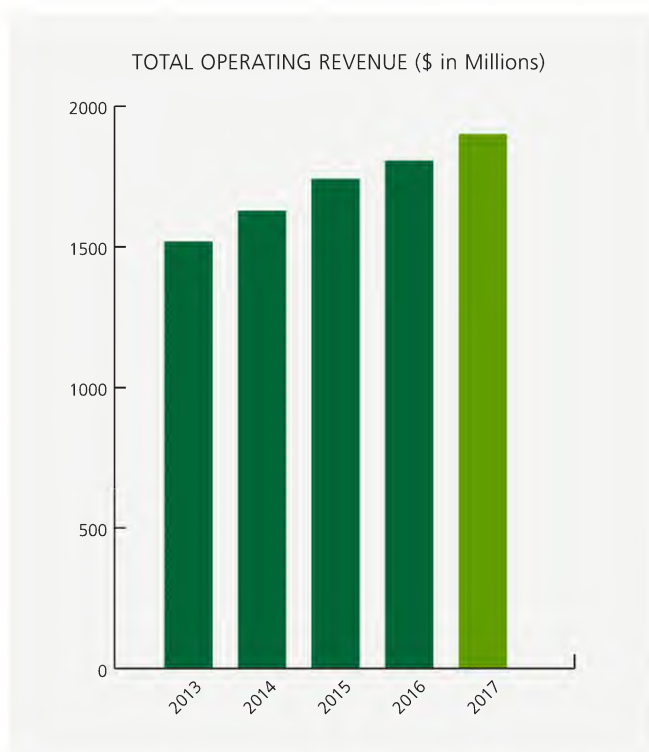
"Palliative care improves quality of life for patients facing life-threatening illnesses and provides much-needed relief for families, but not enough people know about it. We need more educated providers to make this connection for their patients."

— Masako Mayahara, palliative care nurse and former Coleman Foundation fellow

FY2017 Financial Report

Rush University Medical Center and Subsidiaries

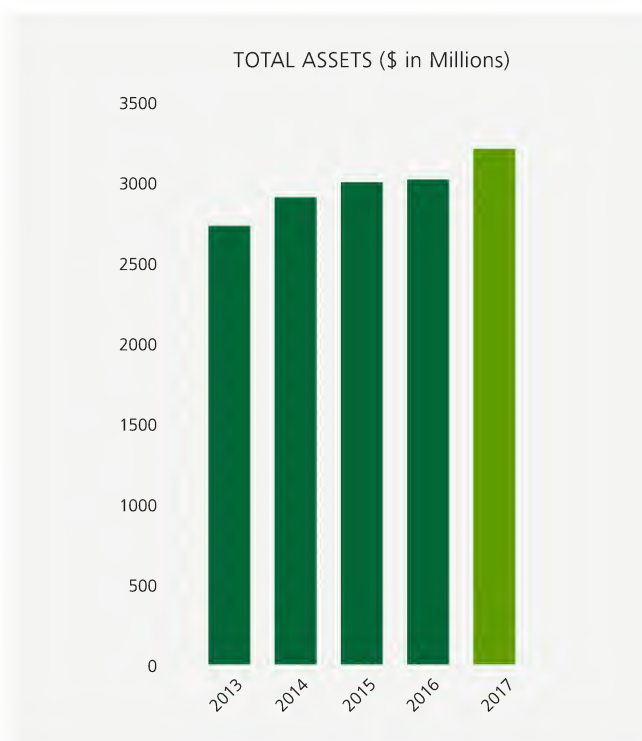
Fiscal year 2017 (July 1, 2016-June 30, 2017) marked another year of strong financial performance, improved patient satisfaction, and recognition of excellence in patient care and quality, education and research. Rush continued to experience consistent operating profitability, growth in revenues and continued liquidity. This financial performance has allowed Rush University Medical Center and its subsidiaries (referred to below as "Rush") to continue to make improvements within clinical programs and quality of care.



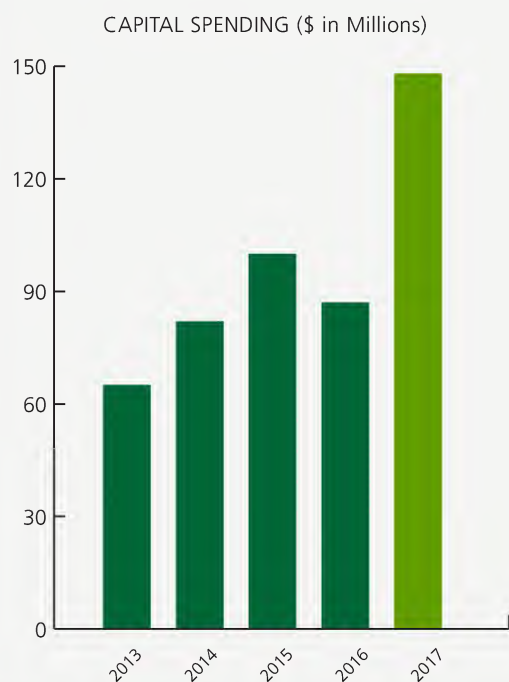
Operating income, one of the most important sources of funding for Rush, was \$70 million during FY2017, which reflects an operating margin of 3.1 percent. In addition Rush had strong investment returns due to favorable market conditions, achieving \$46 million in nonoperating income. The FY2017 total net income of \$105 million is the second-highest-recorded net income ever for Rush. It exceeded Rush's financial targets, which have an underlying objective of achieving a return that will allow the institution to invest and fund future obligations as well as to reinvest in our facilities and core activities of patient care, research, education and community service. Rush's unrestricted cash and

investments, a measure of liquidity, totaled \$865 million as of June 30, 2017. The consistency of the balance sheet and liquidity has become even more important with the challenging health care environment and the competitive Chicago area market.

Patient care continues to be at the center of Rush's mission. Through its investments in clinical programs and demonstrated quality of care, Rush has established itself as a local and national leader in health care. Rush is currently ranked fourth among more than 100 academic medical centers by Vizient's Quality Leadership Award. The award evaluates hospitals on the basis of mortality, effectiveness, safety, patient centeredness and equity of care. In addition, the Centers for Medicare and Medicaid Services, or CMS, continues to recognize Rush as one of the highest rated hospitals in Chicago with its rating system. As of December 2017, Rush is the only Chicago-area academic medical center to receive a five-star rating. The rating is based on ongoing CMS surveys of patient experiences.



Rush remains committed to supporting the communities we serve, including Chicago's West Side. Rush is investing more than \$6 million over the next three years in organizations that are working to revitalize neighborhoods on the West Side of Chicago. These investments are part of Rush's broader endeavor to be an anchor of better health for residents of Chicago's West Side by improving the economic health of these neighborhoods. In total Rush provided \$335 million in community benefits during FY2017. Included within that total, Rush provided \$233 million in unreimbursed care to our patients. Rush also financially supports the education of the next generation of physicians, nurses and allied health professionals and supports the cost of research in excess of external funding received.



Rush is in the midst of a long-term strategic plan, which includes new developments on campus as well as other offsite investments that focus on the ongoing shift to outpatient services. Rush continues to see strong volumes in its first significant offsite campus investment with Rush River North, an outpatient development in Chicago's River North neighborhood that opened in April 2016. Rush has also started construction on two significant offsite developments focusing on outpatient care in Oak Brook and South Loop, both planning to open in FY2019. Rush is continuing to develop plans

for the Rush Center for Advanced Health Care on its main campus, which is expected to open in FY2022. The expansion is a 500,000-square-foot building that will consolidate outpatient services and significantly improve the patient experience.

Philanthropic contributions are increasingly important to Rush in order to accomplish its aforementioned long-term strategic plan, and Rush is grateful to its generous donor community in supporting its mission and vision. Rush raised more than \$41 million in philanthropic funding during FY2017. In addition, the endowment provided \$18 million to Rush and continues to support Rush's programs, including professorships, research and education, free care, student financial aid, scholarships, and fellowships.

As we have seen over the last several years, the health care environment continues to encounter many difficult challenges. With the consistent shrinking margins health care providers face, tax reform that is unfavorable to not-for-profit organizations, the state budget crisis here in Illinois and the competitive Chicago market, there is a significant amount of uncertainty in the health care industry. Despite this, Rush is well-positioned to achieve our aspirational goals projected over the next decade. By maintaining our financial strength in the years to come, Rush has a bright future in continuing to pursue our mission and achieve our vision of becoming the leading health system in the region and nationally recognized for transforming health care.

John P. Mordach
Senior Vice President and Chief Financial Officer
Rush University Medical Center

Philanthropy and Awards

Between July 1, 2016, and June 30, 2017, Rush received more than \$41 million in philanthropic commitments from grateful patients, volunteers, alumni, faculty, staff and friends. This generosity is the momentum that pushes our work from good to great, inspiring us each year to do more, to do better and to defy the impossible.

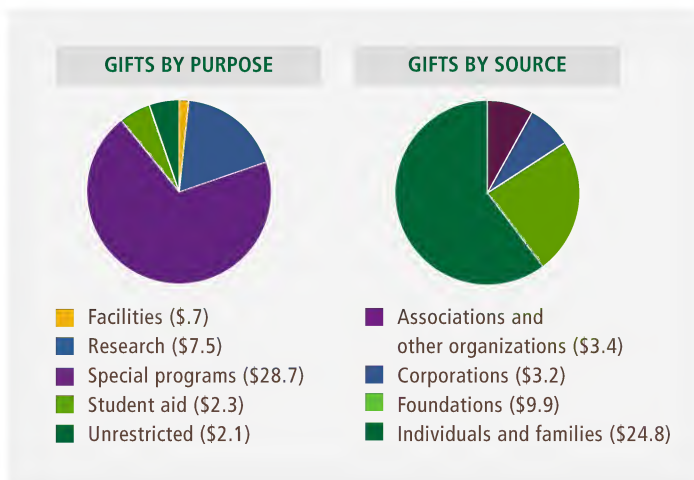
Today's donor support is the foundation from which we build Rush's legacy. More than 420 Rush Heritage Society members are building for the future through planned gifts. By including Rush in their estate plans, these members play an integral role in advancing health care and education far into the future, all while leaving a legacy to a meaningful cause.

Donors like these, among so many others, remind us that the power of philanthropy is not a fleeting gesture, but a shared vision threading throughout our commitment to build a better, healthier world. In allowing us to provide the highest quality of patient care, research and health sciences education at Rush, donors bring us one step closer to fully realizing this vision together.

Much of this same philanthropic support is what provides the necessary seed funding and initial infrastructure from which our physician-researchers' and laboratory scientists' early studies can flourish. Being able to pilot and present their findings more widely leads to these same researchers receiving significant external research awards that further elevate their work. In FY2017 Rush received approximately \$102 million in external research awards from esteemed sources such as the National Institutes of Health — a tremendous feat in a particularly challenging funding environment. These awards have funded research at its earliest, most pivotal stages — studies starting only as innovative ideas, but brought to life by philanthropic support.

On behalf of our patients, students, faculty and staff, thank you to the many individuals, families, corporations, foundations and other organizations who supported Rush in FY2017. A listing of our generous FY2017 donors appears in the spring 2018 issue of our *Envision Rush* donor newsletter. To obtain a print copy of the honor roll, to ensure that you're on our mailing or email lists, or to learn more about giving to Rush, please contact the Office of Philanthropy at (312) 942-6830 or giving@rush.edu.

Thank you for the margin of excellence you provide our people and programs.



Diane M. McKeever
Senior Vice President, Philanthropy
Chief Development Officer
Secretary, The Trustees

Institutional Endowment

Our *2017 Year in Review* is proof of how pivotal the collective generosity of our donors and friends can be in advancing medicine, health care education and overall quality of life. There is perhaps no greater example of these efforts than Rush's endowment funds — among the most powerful donations an academic medical center can receive. These gifts permanently provide Rush the steady income needed to propel the groundbreaking programs and creative minds that keep us a leader in health care transformation.

We are pleased to present this report on the performance of our endowment in fiscal year 2017 (July 1, 2016-June 30, 2017). The endowment returned a robust 14.5 percent, net of fees, buoyed by strong returns in the public equity markets, both in the U.S. and internationally. Over the trailing five-year period, the endowment has returned 8.3 percent annualized, net of fees, generating more than \$200 million of investment return. Results for both periods compare favorably to the one- and five-year average annualized returns of 12.2 percent and 7.9 percent respectively, as reported in the 2017 NACUBO-Commonfund Study of Endowments®.

Reaching a new high point of \$568 million in assets, the endowment has been able to provide increasing levels of program support totaling \$85.9 million over the last five years while receiving \$26.5 million from our generous donors. With your support, the endowment is able to serve as a critical source of funds supporting our mission in patient care, education and research and strengthening our community partnerships. Our goal of providing responsible stewardship for these entrusted funds remains our unwavering commitment.

On behalf of the executive leadership and that of the Board of Trustees, thank you for your continued investment in Rush's mission and efforts to define tomorrow's health care landscape.



Larry Goodman, MD
Chief Executive Officer, Rush
President, Rush University



Alex Wiggins
Associate Vice President
Treasury, Rush University Medical Center

Rush University Medical Center Facts 2017

All statistics, unless otherwise noted, refer to Rush University Medical Center.



FOUNDED
1837

Rush Medical College received its charter on March 2, 1837, two days before the city of Chicago was incorporated. Rush Medical College was the first medical school in Chicago and one of the earliest in the Midwest.

PEOPLE



1,462

Medical staff

Professional nursing staff

3,472

Total Medical Center: 2,040
Division of Nursing: 1,432

Residents and fellows

706

Residents: 545
Fellows: 161

10,038

Employees

STUDENT BODY



532

Rush
Medical College

1,049

College
of Nursing

582

College of
Health Sciences

234

The Graduate
College

40

Students-at-
Large
(non-degree-seeking)

2,438

University
Total

BIRTHS

2,267



Patient Statistics by Site



Admissions

31,500

4,585

Average Stay (Days)

5.63

4.70

Patient Days

177,478

21,553

Operations Performed

21,604

5,802

5,819 (Rush Surgicenter)

Emergency Room Visits

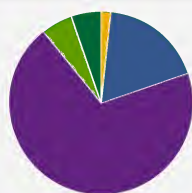
71,288

37,613

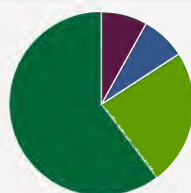
\$41,294,797

Total Philanthropic Gifts (in millions)

GIFTS BY PURPOSE



GIFTS BY SOURCE

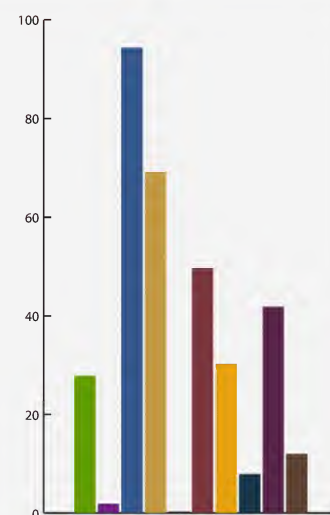


\$335,062,541

Total Community Benefits (in millions)

(Includes Rush Oak Park Hospital)

- Charity care (\$27.8)
- Language assistant services (\$1.9)
- Unreimbursed medical care (Medicare) (\$94.3)
- Unreimbursed medical care (Medicaid) (\$69.1)
- Donations (\$0.3)
- Support for education projects (\$49.6)
- Support for research programs (\$30.3)
- Subsidized health services (\$7.9)
- Unrecoverable patient debt (\$41.8)
- Other community benefits (\$12)

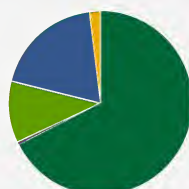


\$102,050,826

Total Research Awards (in millions)

RESEARCH AWARDS BY SOURCE

- National Institutes of Health (\$69)
- Other federal awards (\$0.6)
- Other public health awards (\$11)
- Private corporations (\$19.6)
- Other (\$1.8)



STAFFED BEDS



603

Rush University
Medical Center

72

Johnston R. Bowman
Health Center

68

Rush Oak
Park Hospital